

WHAT IS CLAIMED IS:

134523 1. A treatment composition, comprising:

- i) an aqueous continuous phase;
- ii) a reactive component comprising a reactive agent and a water immiscible solvent, wherein the water immiscible solvent solubilizes the reactive agent; and
- iii) one or more surfactants wherein the surfactants emulsify the reactive component in the aqueous phase to form a bi-layer emulsion.

2. A treatment composition according to Claim 1, wherein the reactive agent is covalently reactive with an amino acid based substrate.

3. A treatment composition according to Claim 2, wherein the reactive agent is covalently reactive with human hair.

4. A treatment composition according to Claim 3, wherein the reactive agent comprises one or more reactive groups selected from the group consisting of electrophilic groups, nucleophilic groups, protected thiol groups and mixtures thereof.

5. A treatment composition according to Claim 4, wherein the reactive agent also comprises a cosmetically active functional group.

6. A treatment composition according to Claim 1, wherein the treatment composition comprises from about 0.01% to about 10% by weight of the composition, of the reactive agent; from about 1% to about 50% by weight of the composition, of the water immiscible solvent; from about 1% to about 50%, by weight of the composition, of the surfactants; and from about 20% to about 95%, by weight of the composition, of the aqueous continuous phase.

7. A treatment composition according to Claim 6, wherein the reactive agent comprises an electrophilic reactive group selected from the group consisting of halotriazine, haloquinoxaline, halopyrimidine, vinylsulfone, β -haloethylsulfone, β -sulfatoethylsulfone, acrylates, methacrylate, acrylamide, methacrylamide, maleimide, epoxide, acylhalide, ester, carbamate, dithiocarboxylic acid ester, alkoxysilane, thiosulfate, anhydride, urea derivative, isothiocyanate, isocyanate, lactone, thiosulfate, isothiuronium, azolactone electrophilic groups and mixtures thereof.

8. A treatment composition according to Claim 6, wherein the reactive agent comprises a nucleophilic reactive group selected from the group consisting of thiols, thiolates, thiols or thiolates containing quaternary salts, thioalkyl esters, thioalkylamides, thiol or thiolate derivatives of cysteamine, and mixtures thereof.

9. A treatment composition according to Claim 6, wherein the reactive agent comprises a protected thiol reactive group having the formula



where R is a mono or multivalent cosmetically active functional group, S is sulfur, Pr is a protecting group and m is an integer between 1 and 100.

10. A treatment composition according to Claim 9, wherein the protecting group is selected from the group consisting of heterocyclic protecting groups, sp^2 aliphatic trigonal carbon protecting groups, sp^3 carbon electrophilic protecting groups, phosphorus protecting groups, metal based protecting groups, non-metal and metalloid based protecting groups other than phosphorus, energy-sensitive protecting groups and mixtures thereof.

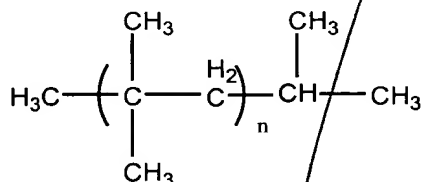
11. A treatment composition according to Claim 1, wherein the water immiscible solvent comprises solvents selected from the group consisting of a volatile silicone compounds, nonvolatile silicone compounds, volatile hydrocarbons, nonvolatile hydrocarbons, propylene carbonates and mixtures thereof.

12. A treatment composition according to Claim 11, wherein the water immiscible solvent comprises solvents selected from the group consisting of linear and cyclic polydimethylsiloxanes and mixtures thereof.

13. A treatment composition according to Claim 12, wherein the water immiscible solvent comprises hexamethyl siloxane and cyclomethicone.

14. A treatment composition according to Claim 13, wherein the water immiscible solvent is selected from volatile and nonvolatile hydrocarbon compounds having about 10 to 30 carbon atoms.

15. A treatment composition according to Claim 14, wherein the water immiscible solvent comprises compound depicted by the following general structure wherein n ranges from 2 to 5,



16. A treatment composition according to Claim 1, wherein the surfactant is chosen from the group consisting of anionic surfactants, cationic surfactants, nonionic surfactants, amphoteric surfactants, zwitterionic surfactants, and mixtures thereof.

17. A treatment composition according to Claim 16, wherein the surfactant comprises from about 1% to about 20% of one or more quaternary ammonium halides, and from about 0% to about 20% of cholesterol.

18. A treatment composition according to Claim 17, wherein the surfactant from about 1% to about 20% of phospholipids.

19. A treatment composition according to Claim 18, wherein the surfactant comprises from about 1% to about 10% of a quaternary ammonium halide, and from about 1% to about 20% of a nonionic surfactant.

20. A treatment composition according to Claim 1, wherein the reactive agent is charged.

21. A treatment composition according to Claim 1, wherein the reactive agent is charged and the surfactants have the same net charge as the reactive agent.

22. A treatment composition according to Claim 1, wherein the treatment composition comprises from about 1% to about 4%, by weight, of thiol pyrimidinium, from about 3% to about 30%, by weight, of Isopar C, from about 5% to about 30%, by weight, of cetyltrimethylammonium chloride, and from about 36% to about 91%, by weight, of the aqueous continuous phase.

23. A treatment composition according to Claim 22, wherein the treatment composition further comprises from about 0.1% to about 10%, by weight, of a crystalline, hydroxyl-containing stabilizer.

24. A method of treating amino acid based substrates by applying to the substrates an effective amount of composition according to Claim 1, wherein the composition provides a long-lasting treatment effect.

25. A method of treating hair to provide hair benefits selected from the group consisting of bleaching, coloring, conditioning and mixtures thereof by applying to hair an effective amount of composition according to Claim 1, wherein the composition provides a long-lasting treatment effect.

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